ISSN 2548-6462 (online), ISSN 2088-8740 (print)

DOI: 10.30644/rik.v13i1.830

Parenting Patterns and Environmental Factors for Suku Anak Dalam (SAD) Toddlers at Risk of Stunting in Muaro Jambi Regency

Yurizal^{1*}, Najmah¹, Anita Rahmiwati¹

¹ Public Health Science Study Program FKM Sriwijaya University, Palembang, Indonesia

*Corresponding author's email: mbudyurizal@gmail.com

Accepted: 9 February 2024; revision: 21 June 2024; published: 30 June 2024

Abstract

Background: Health problems that often occur in SAD communities are low nutritional status and poverty problems in SAD communities. Overcoming stunting requires addressing the main direct cause, namely an inadequate household and family environment. The aim of this research is to analyze parenting patterns and environmental factors for SAD toddlers at risk of stunting in Muaro Jambi Regency.

Method: This research uses qualitative methodology with an ethnographic research design. The aim is to study and collect data on environmental factors and parenting patterns based on daily cultural norms and activities adopted by the SAD community in Nyogan Village. Data collection used visual methods, in-depth interviews and FGD (focus group discussions), as well as anthropometric measurements. The informants for this research were 20 people consisting of the main informants, namely 15 mothers of toddlers and 5 key informants.

Results: Inadequate maternal parenting and environmental factors are the causes of stunting in SAD toddlers.

Conclusion: It is necessary to optimize the mother's caring role in the practice of providing food and hygiene and environmental sanitation to prevent the risk of stunting in toddlers with SAD.

Keywords: Stunting, SAD, Parenting, Environmental Factors

INTRODUCTION

Stunting describes chronic malnutrition and can have long-term impacts, including growth retardation, decreased cognitive and mental abilities, vulnerability to disease, low economic productivity and low quality reproductive outcomes. Stunting occurs because children do not receive adequate or appropriate nutrition at all stages of their lives. This condition can have a significant impact on the child's long-term health and survival (1).

In 2018 there were 22.2% or around 150.8 million children under five in the world stunted. More than a third of stunted toddlers in the world come from Asia (31.9%) after Africa (33.1%) (2). Based on the 2022 World Bank global database, in 2018 there were eighteen countries with a stunting prevalence of >30.0%, Indonesia ranked first in the Southeast Asia Region, namely 30.8% (3).

Muaro Jambi Regency is one of the regions in Indonesia that will become a stunting locus or priority area in reducing stunting to 14% by 2024. This district is one of

514 districts/cities focused on integrated stunting reduction interventions in 2022 which will be expanded from 360 districts/cities in the previous year in accordance with the targets in the 2020-2024 National Medium Term Development Plan (RPJMN) (4). stunting incidents in Jambi are caused by poverty. Communities experiencing poverty include the Anak Dalam Tribe. Poverty is increasingly ensnaring the SAD due to the reduction in land and sources of livelihood for those who are very dependent on hunting and gathering forest products which are becoming increasingly scarce due to changes in land use (5).

SAD or also called Orang Rimba is a remote traditional community in Jambi Province which is spread out in small groups in secondary forests and oil palm plantations and industrial plantation forests in Jambi Province. The largest concentration of SAD is in the Bukit Dua Belas National Park (TNBD), then along the central Sumatra highway from the Jambi-South Sumatra Border to the Jambi West

Sumatra Border, where the living area has become an oil palm plantation and transmigration area. The other part, SAD is in industrial forest plantations south of the Bukit Tigapuluh National Park (TNBT) (6).

There are still quite a lot of SAD communities in Jambi Province. The number of SAD in Jambi Province up to 2010 was recorded at 6,773 families or 28,883 people spread across 8 districts, namely Muaro Jambi. Batanghari, Tebo, Sarolangun, Merangin, Bungo, West Tanjung Jabung and East Tanjung Jabung. There are several groups that have been fostered and housed by the government, including in Nyogan Village, Muaro Jambi Regency since 2004. The change in lifestyle from nomadic to sedentary has resulted in changes in the livelihoods, lifestyle and daily eating patterns of this SAD community (7).

WHO more comprehensively explains that the direct causes of stunting are related to infectious diseases, breastfeeding practices, low food availability, and inadequate household and family environments (8). In line with this, Pradigdo found that the incidence of stunting was higher in nomadic SAD toddlers (42.4%) than sedentary SAD toddlers (28.2%) (9) Haris, A found that the incidence of stunting among toddlers from the Anak Dalam Tribe in Nyogan Village, Muaro Jambi Regency was 42.2% (10).

A study conducted by Manjong F revealed that in the indigenous group, maternal, child, socio-economic environmental factors contributed to stunting in children. One of the most significant predictors is inadequate water sources, sanitation and hygiene. Environmental hygiene sanitation have a dominant role in providing an environment that supports toddlers' health and growth and development. Due to lack of hygiene, children under five will often get sick (11).

Ramadhani F found that parenting style is a risk factor for stunting in Papuan tribes (12). Wahdah, S found in the Pedalaman area of Silat Hulu District, West Kalimantan that good parenting is a very important factor in ensuring optimal growth and development. (13). The mother's parenting pattern is closely

related to the mother's condition, especially her health, education, knowledge and skills regarding child care. In the Bugis tribe, most mothers who do not prepare certain foods have stunting of 84.5% and those who do not make certain preparations have stunting of 86.4% (14).

METHOD

This research qualitative uses methodology with an ethnographic research design. Ethnography or ethnomethodology is a qualitative research model that has the aim of describing the cultural characteristics found in individuals or groups of people who are members of a cultural community group (15). In this ethnographic research, the aim is to study and collect data on environmental factors and parenting patterns based on daily cultural norms and activities adopted by the SAD community in Nyogan Village, Muaro Jambi Regency. Researchers observed what activities were carried out by the child's tribe in relation environmental factors, to parenting patterns.

The research was conducted in Nyogan Village, Muaro Jambi Regency. Province, from May to December 2023. The sampling technique used purposive sampling. Data collection used visual methods, in-depth interviews and FGD (focus group discussions), as well as anthropometric measurements. The informants for this research were 20 people consisting of the main informants, namely 15 mothers of toddlers and 5 key informants consisting of the nutritionist at the Muaro Jambi Regency Health Office, the Tempino Health Center nutritionist, the Nyogan Village Midwife, the Temenggung SAD traditional head and the Nyogan Village Head.

The data collection techniques used were visual, in-depth interviews, FGD and anthropometric measurements. To test the validity of qualitative data, researchers used a triangulation (combined) method, namely triangulation of sources, methods and data (16). Thematic analysis is one way to carry out data analysis which aims to identify patterns or to find themes through the data obtained by the researcher.

This research was conducted after obtaining approval from the Research Ethics Committee of the Faculty of Public Health, Sriwijaya University to ensure that the proposed research was ethically acceptable and the rights of research participants were protected. This research has received information about passing ethical review from the Health Research Ethics Commission, Faculty of Public Health, Sriwijaya University with Number: 238/UN9.FKM/TU.KKE/2023 on May 26 2023.

RESULTS

1. Informant Characteristics

The informants for this research consisted of the main informant and key informants. The main informants consisted of 15 mothers who had toddlers in Nyogan Village, Mestong District, Muaro Jambi Regency. The characteristics of these main informants can be seen in table 1.

Table 1 Characteristics of Main Informants in SAD in Muaro Jambi Regency

Informant code	Age (Years)	Education	Work	KK Education	KK Work
01	25	Elementary school	Housewife	elementary school	Fishing
02	32	not completed in primary school	Housewife	not completed in primary school	Private
03	20	not completed in primary school	Housewife	elementary school	Fishing
04	22	Junior high school	Housewife	not completed in primary school	Fishing
05	28	not completed in primary school	Trader	not completed in primary school	Laborer
06	23	Senior high school	Housewife	Senior high school	Farmer
07	23	Junior high school	Trader	elementary school	Laborer
08	40	not completed in primary school	Trader	not completed in primary school	Fishing
09	23	not completed in primary school	Housewife	elementary school	Private
10	40	Elementary school	Housewife	Junior high school	Laborer
11	16	Elementary school	Housewife	not completed in primary school	Fishing
12	27	Elementary school	Housewife	Junior high school	Farmer
13	23	Elementary school	Housewife	not completed in primary school	Fishing
14	33	not completed in primary school	Fishing	elementary school	Fishing
15	21	Elementary school	Housewife	not completed in primary school	Laborer

Source: Main Informant Primary Data, 2023

Based on table 1, it can be seen that the main informants in this study were mothers aged 16 - 40 years who had toddlers and most of them still had low education, namely 6 people had not finished elementary school and 7 heads of families had also not finished elementary school. The occupation of the 11 main informants is housewife, while the 7 heads of their families work fishing in the Bahar River, because the location of the SAD settlement is on the banks of the Bahar River. The Bahar River is the source of life for SAD. The majority of SAD do not have a definite job, almost all SAD there earn their living by fishing. To obtain reliable data,

researchers triangulated sources by conducting Focus Group Discussions with 8 main informants and reviewing documents such as looking at KIA books and cadre books.

The next informants were key informants consisting of 5 people, namely the Head of the Nutrition Section of the Muaro Jambi District Health Service, nutrition workers at the Tempino Health Center, Village Midwives, community leaders and the Head of Nyogan Village. Indepth interviews were conducted with these key informants. The characteristics of key informants can be seen in table 2.

Table 2 Characteristics of Key Informants in SAD in Muaro Jambi Regency

Informant Code	Type of informant	Education	
01	Nutritionist at the Muaro Jambi Regency Health Office	Master of Public Health	
02	Tempino Health Center nutritionist	Third Diploma in Midwifery	
03	Nyogan Village Midwife	Third Diploma in Midwifery	
04	Temenggung SAD traditional head	No school	
05	Nyogan village head	Senior high school	

Source: Key Informant Primary Data, 2023

2. Incidents of Toddlers at Risk of Stunting in SAD in Muaro Jambi Regency

The SAD toddlers in this study ranged in age from 16 to 58 months. The results of the analysis showed that the average HAZ score (TB/U) for toddlers was -2.01 + 0.4. Then the scores are grouped into stunting, at risk of stunting

and not stunting. In this study, it was found that 26.7% of SAD toddlers were stunted and 53.3% of SAD toddlers were at risk of stunting. Toddlers who are not stunted are 20%. The incidence of toddlers at risk of stunting can be seen more clearly in table 3 and figure 1.

Table 3 Incidents of Toddlers at Risk of Stunting in SAD in Muaro Jambi Regency

Informant Code	Age (months)	HAZ score (TB/U)	Nutritional status
01	18	-1,96	at risk of stunting
02	30	-1,22	not stunted
03	56	-2,72	Stunting
04	26	-2,54	Stunting
05	20	-1,90	at risk of stunting
06	19	-1,94	at risk of stunting
07	35	-1,98	at risk of stunting
08	29	-2,63	Stunting
09	36	-1,97	at risk of stunting
10	18	-1,51	not stunted
11	16	-1,54	not stunted
12	39	-1,91	at risk of stunting
13	17	-1,95	at risk of stunting
14	31	-1,91	at risk of stunting
15	58	-2,43	Stunting

Source: Anthropometric Primary Data, 2023

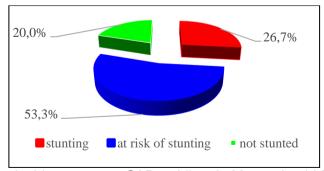


Figure 1 Stunting incidents among SAD toddlers in Muaro Jambi Regency in 2023

ISSN 2548-6462 (online), ISSN 2088-8740 (print)

3. Description of Mother's Parenting Patterns for SAD Toddlers at Risk of Stunting in Muaro Jambi Regency

Based on the results of in-depth interviews with informants, mothers' parenting patterns were found to be inadequate in 12 SAD toddlers who were stunted and at risk of stunting, including patterns of giving food and basic health care. Mother's parenting patterns for toddlers with SAD can be seen in table 4.

Based on data obtained from research results, inadequate maternal parenting is the cause of stunting in SAD toddlers. For example, information from informant 1, informant 3 to informant 9, informant 12 to informant 15 who have stunted toddlers and are at risk of stunting.

The information obtained was that these toddlers experienced inadequate parenting.

- "...Ditingokanlah bae budak ko makan. Kalo idak habis disuruh dihabiskan. Banyaknyo seperti biasolah. Apo yang kito makan itu pulo dikasihkan." (Informant 1)
- "...Pas waktunyo makan dikasihlah makan. Kalo idak habis yo biaklah. (Informant 3)
- "...Samolah kalo kito makan, budak ko dikasih pulo makan. Idak ado dibedakan." (informant 4)
- "...Lah biso makan dewek jadi diambilkan makannyo dibiarkan be dio makan." (Informant 7)

Table 4 Distribution of SAD Toddlers at Risk of Stunting Based on Mother's Parenting Patterns in Muaro Jambi Regency in 2023

Informant	Toddler	Mother's	Category	
Code	Informant	Feeding	Basic Health	Category
01	at risk of stunting	Prepare your child's food needs yourself Give fruit and vegetables to children Not controlling children's food Children have no dietary	their hands with soap Bathe your toddler yourself Don't take him to posyandu every month Take your child to a health	The mother's parenting style is inadequate
02	not stunted	restrictions Prepare your child's food needs yourself Give fruit and vegetables to children Controlling children's food Children have no dietary restrictions	facility if they are sick Teach children to wash their hands with soap Bathe your toddler yourself Don't take him to posyandu every month Take your child to a health facility if they are sick	The mother's parenting style is adequate
03	Stunting	Prepare your child's food needs yourself Give fruit and vegetables to children Not controlling children's food Children have no dietary restrictions	Teach children to wash their hands with soap Bathe your toddler yourself Don't take him to posyandu every month Take your child to a health facility if they are sick	The mother's parenting style is inadequate
04	Stunting	Prepare your child's food needs yourself Give fruit and vegetables to children Not controlling children's food Children have no dietary restrictions	Teach children to wash their hands with soap Bathe your toddler yourself Don't take him to posyandu every month Take your child to a health facility if they are sick	The mother's parenting style is inadequate

Riset Informasi Kesehatan 11

Informant Toddler		Mother's	Catagomi	
Code	Informant	Feeding	Basic Health	Category
05	at risk of stunting	Prepare your child's food needs yourself Give fruit and vegetables to children	Teach children to wash their hands with soap Bathe your toddler yourself	The mother's parenting style is inadequate
06	at risk of stunting	Not controlling children's food Children have food restrictions (tofu, tempeh)	Don't take him to posyandu every month Take your child to a health facility if they are sick Teach children to wash their hands with soap Bathe your toddler yourself Don't take him to posyandu every month Take your child to a health facility if they are sick	The mother's parenting style is inadequate
07	at risk of stunting	Prepare your child's food needs yourself Give fruit and vegetables to children Not controlling children's food	Teach children to wash their hands with soap Bathe your toddler yourself Don't take him to posyandu every month	The mother's parenting style is inadequate
08	Stunting	Children have no dietary restrictions Prepare your child's food needs yourself Give fruit and vegetables to children Not controlling children's food Children have no dietary restrictions	Take your child to a health facility if they are sick Not teaching children to wash their hands with soap Bathe your toddler yourself Don't take him to posyandu every month Take your child to a health	The mother's parenting style is inadequate
09	at risk of stunting	Not preparing your child's food needs yourself Give fruit and vegetables to children Not controlling children's food Children have no dietary restrictions	facility if they are sick Not teaching children to wash their hands with soap No, bathe your toddler yourself Don't take him to posyandu every month Do not take your child to a	The mother's parenting style is inadequate
10	not stunted	Prepare your child's food needs yourself Give fruit and vegetables to children Controlling children's food Children have no dietary restrictions	health facility if he is sick Teach children to wash their hands with soap Bathe your toddler yourself Don't take him to posyandu every month Take your child to a health facility if they are sick	The mother's parenting style is adequate
11	not stunted	Prepare your child's food needs yourself Give fruit and vegetables to children Controlling children's food Children have no dietary restrictions	Not teaching children to wash their hands with soap Bathe your toddler yourself Don't take him to posyandu every month Do not take your child to a health facility if he is sick	The mother's parenting style is adequate

Informant	Toddler	Mother's	Category	
Code	Informant	Feeding	Basic Health	Calegory
12	at risk of stunting	Prepare your child's food needs yourself Give fruit and vegetables to children Not controlling children's food Children have no dietary restrictions	Teach children to wash their hands with soap Bathe your toddler yourself Take him to the posyandu every month Take your child to a health facility if they are sick	The mother's parenting style is inadequate
13	at risk of stunting	Prepare your child's food needs yourself Give fruit and vegetables to children Not controlling children's food Children have food restrictions (shrimp)	Teach children to wash their hands with soap Don't bathe your toddler yourself Don't take him to posyandu every month Take your child to a health facility if they are sick	The mother's parenting style is inadequate
14	at risk of stunting	Prepare your child's food needs yourself Give fruit and vegetables to children Not controlling children's food Children have food restrictions (beans, shrimp)	Teach children to wash their hands with soap Don't bathe your toddler yourself Don't take him to posyandu every month Do not take your child to a health facility if he is sick	The mother's parenting style is inadequate
15	Stunting	Prepare your child's food needs yourself Give fruit and vegetables to children Not controlling children's food Children have no dietary restrictions	Teach children to wash their hands with soap Bathe your toddler yourself Don't take him to posyandu every month Do not take your child to a health facility if he is sick	The mother's parenting style is inadequate

4. Description of Environmental Factors (Source of Drinking Water and Environmental Sanitation) in SAD Toddlers at Risk of Stunting in Muaro Jambi Regency

Inadequate household environment is the cause of the high incidence of stunting in SAD toddlers. A good enough household environment determines whether or not the innate potential of toddlers can be achieved. For example, nutritional problems in Nyogan village are caused by environmental factors such as inadequate sources of drinking water, sanitation and sanitation facilities, which can be seen in table 5 and figure 2.



Figure 2. SAD Environmental Conditions in Nyogan Village

Table 5 Distribution of SAD Toddlers at Risk of Stunting Based on Environmental Factors in Muaro Jambi Regency in 2023

Factors in Muaro Jambi Regency in 2023					
Informant Code	Toddler Informant	Environmental Factors	Category		
01	at risk of stunting	Drinking water sources are not suitable Household sanitation is inadequate Sanitary facilities are inadequate	The household environment is inadequate		
02	Not stunted	Drinking water sources are adequate Household sanitation is adequate Sanitary facilities are adequate	The household environment is inadequate		
03	Stunting	Drinking water sources are not suitable Household sanitation is inadequate Sanitary facilities are inadequate	The household environment is inadequate		
04	Stunting	Drinking water sources are not suitable Household sanitation is inadequate Sanitary facilities are inadequate	The household environment is inadequate		
05	Beresiko stunting	Drinking water sources are not suitable Household sanitation is inadequate Sanitary facilities are inadequate	The household environment is inadequate		
06	Beresiko stunting	Drinking water sources are not suitable Household sanitation is inadequate Sanitary facilities are inadequate	The household environment is inadequate		
07	Beresiko stunting	Drinking water sources are not suitable Household sanitation is inadequate Sanitary facilities are inadequate	The household environment is inadequate		
08	Stunting	Drinking water sources are not suitable Household sanitation is inadequate Sanitary facilities are inadequate	The household environment is inadequate		
09	at risk of stunting	Drinking water sources are not suitable Household sanitation is inadequate Sanitary facilities are inadequate	The household environment is inadequate		
10	Not stunted	Drinking water sources are adequate Household sanitation is adequate Sanitary facilities are adequate	The household environment is adequate		
11	Not stunted	Drinking water sources are adequate Household sanitation is adequate Sanitary facilities are adequate	The household environment is adequate		
12	at risk of stunting	Drinking water sources are not suitable Household sanitation is inadequate Sanitary facilities are inadequate	The household environment is inadequate		
13	at risk of stunting	Drinking water sources are not suitable Household sanitation is inadequate Sanitary facilities are inadequate	The household environment is inadequate		
14	Beresiko stunting	Drinking water sources are not suitable Household sanitation is inadequate Sanitary facilities are inadequate	The household environment is inadequate		
15	Stunting	Drinking water sources are not suitable Household sanitation is inadequate Sanitary facilities are inadequate	The household environment is inadequate		

DISCUSSION

The way of parenting will also influence the occurrence of stunting, even though there is sufficient food at home and the family lives in a safe and healthy environment and has access to health services, children can still experience malnutrition. Inadequate care for children and women is the third element causing malnutrition that must be taken into account. To fulfill nutrition, parenting includes all actions and behaviors in

translating available food and health resources to achieve optimal child growth and development. Child rearing is the responsibility of the entire family and community, especially if the mother needs support and assistance in caring for the child in the form of providing food, maintaining the child's health, and providing cognitive stimulation. (8).

The mother's parenting pattern is closely related to the mother's health, education,

knowledge and skills regarding child care. In the Bugis tribe, most mothers who do not prepare certain foods have stunting of 84.5% and those who do not make certain preparations have stunting of 86.4% (14).

Environmental sanitation is closely related to the availability of clean water, the availability of latrines, the type of floor in the house and the cleanliness of eating utensils in each family. The more clean water available for daily needs, the smaller the risk of children suffering from malnutrition. The use of clean water is one of WHO's programs together with UNICEF and USAID to improve nutritional status through water, sanitation cleanliness (Water, Sanitation and Hygiene = WASH). Lack of access to WASH can affect children's nutritional status in many ways. Existing evidence supports at least three direct pathways: via diarrheal disease, intestinal parasitic infections and environmental enteropathy. WASH can also affect nutritional status indirectly by requiring long distances to search for water and sanitation facilities and diverting mothers' time from child care. Unsafe water and poor sanitation and hygiene impact children's nutrition, growth and development through repeated attacks of diarrhea, parasitic or worm infections (17).

Water, sanitation and hygiene are the main factors causing stunting. Inadequate food hygiene, as well as the use of unsafe drinking water in food preparation, is a significant cause of diarrheal disease in infants and young children in low-income countries. Poor hygiene and unsafe drinking water can also cause diarrhea and food poisoning in pregnant women, which can have adverse effects on the fetus. Safe and healthy drinking water is an important component of a good diet, while safe sanitation and cleanliness protect against disease and nutrient loss (17).

Water, sanitation and hygiene are the main factors causing stunting. Inadequate food hygiene, as well as the use of unsafe drinking water in food preparation, is a significant cause of diarrheal disease in infants and young children in low-income countries. Poor hygiene and unsafe drinking water can also cause diarrhea and food

poisoning in pregnant women, which can have adverse effects on the fetus. Safe and healthy drinking water is an important component of a good diet, while safe sanitation and cleanliness protect against disease and nutrient loss (11).

The problem of malnutrition is caused by environmental factors (insufficient sanitation and drinking water sources), inadequate health services, low maternal nutrition, poor feeding habits and low household food security (8). UNICEF states that in developing countries, unsafe water and poor sanitation and hygiene impact children's nutrition, growth and development through repeated bouts of diarrhea, parasitic or worm infections. (17).

To reduce the incidence of stunting in SAD toddlers, it is hoped that optimal maternal care both in providing food and also in environmental hygiene and sanitation practices can be carried out at every level in Nyogan Village starting from the individual, family and community levels, supported by community leaders, health workers and local government.

CONCLUSIONS

The causes of the high incidence of stunting among toddlers in the inner tribe include inadequate household environment and family care. To overcome this cause, it is necessary to optimize the mother's caring role in the practice of providing food and hygiene and environmental sanitation to prevent the risk of stunting in toddlers with SAD.

ACKNOWLEDGEMENTS

Author would like to thank the Director of the Health Polytechnic, Ministry of Health, Jambi, and thesis supervisors who has supported this research activity.

REFERENCES

- UNICEF. Situasi Anak di Indonesia 2020. Jakarta; 2020 May.
- 2. World Health Organization. World Health Statistics data visualizations dashboard. 2019.
- The World Bank. Prevalence of stunting, height for age (% of children under 5) [Internet]. 2022 [cited 2023 Feb 8]. Available from:

- https://data.worldbank.org/indicator/S H.STA.STNT.ZS
- 4. Kementerian PPN/Bappenas. Keputusan Menteri Perencanaan Pembangunan Nasional/Kepala Badan Perencanaan Pembangunan Nasional Nomor KEP.10/M.PPN/HK/02/2021. 2021:
- Asril S. Lama Hidup Nomaden, Kini Suku Anak Dalam Punya Hunian Tetap. 2017 Feb 19;
- Sukmareni. Alam Sumatera "Pendidikan dan Sumber Kehidupan Orang Rimba" [Internet]. 2021 Nov. Available from: http://www.warsi.or.id
- Dinas Sosial Tenaga Kerja dan Transmigrasi. Profil Komunitas Adat Terpencil (KAT) dan Program Pemberdayaan KAT di Provinsi Jambi. 2013.
- 8. World Health Organization. Childhood Stunting: Context, Causes and Consequences [Internet]. 2016 [cited 2022 Oct 15]. Available from: https://www.who.int/publications/m/ite m/childhood-stunting-context-causes-and-consequences-framework
- Pradigdo SF, Kartasurya MI, Azam M. Gambaran Pola Makan, Tabu, Infeksi dan Status Gizi Balita Suku Anak Dalam di Provinsi Jambi. Amerta Nutrition. 2022 Dec;6(1SP):126–32.
- Haris A, Fitri A, Kalsum U. Determinan Kejadian Stunting dan Underweight pada Balita Suku Anak Dalam di Desa Nyogan Kabupaten Muaro Jambi Tahun 2019. Jurnal Kesmas Jambi. 2019;3(1):41–53.
- Manjong FT, Siysi Verla V, Egbe TO, Shey Nsagha D. Risk factors of under nutrition among indigenous children under five years in developing countries: A scoping review. J Public Health Epidemiol [Internet]. 2020;12(4):340–8. Available from: http://www.academicjournals.org/JPH E
- Ramadhani FN, Kandarina BI, Gunawan IMA. Pola Asuh dan Pola Makan sebagai Faktor Risiko Stunting Balita Usia 6-24 bulan Suku Papua dan

- Non-Papua. Berita Kedokteran Masyarakat. 2019;35(4).
- 13. Wahdah S, Juffrie M, Huriyati E. Faktor risiko kejadian stunting pada anak umur 6-36 bulan di Wilayah Pedalaman Kecamatan Silat Hulu, Kapuas Hulu, Kalimantan Barat. Jurnal Gizi dan Dietetik Indonesia. 2015;3(2):119–30.
- Putriana AE, Masfufah, Kariani NK. Stunting Berdasarkan Budaya Makan Suku Makassar, Toraja dan Bugis. J Gizi Kerja dan Produktivitas. 2020;1(2):25–33.
- Hadi A, Asrori A, Rusman R.
 Penelitian kualitatif: studi fenomenologi, case study, grounded theory, etnografi, biografi. 2021.
- 16. Sutopo HB. Metodologi penelitian kualitatif. 2002.
- World Health Organization and UNICEF. ASEAN Food and Nutrition Security Report 2021. 2022.